

ABSTRACT OF THE DISCLOSURE

[94] Data services are managed by a three-tiered system. The lowest tier comprises management facade software running on each machine that converts a platform-dependent interface written with the low-level kernel routines that actually
5 implements the data services to platform-independent method calls. The middle tier is a set of federated Java beans that communicate with the management facades and with the upper tier of the system. The upper tier of the inventive system comprises presentation programs that can be directly manipulated by management personnel to view and control the system.